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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,859	09/23/2003	Brian Stephen Kimberley	1435-83-1	1357
22852 7	7590 02/27/2006		EXAM	INER
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER			CHOI, LING SIU	
LLP 901 NEW YORK AVENUE, NW			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20001-4413			1713	<u></u>
			DATE MAILED: 02/27/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

		· D				
	Application No.	Applicant(s)				
	10/667,859	KIMBERLEY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ling-Siu Choi	1713				
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING [ - Extensions of time may be available under the provisions of 37 CFR 1, after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO  .136(a). In no event, however, may a reply be tind  d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 30 I	November 2005.					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi						
3) Since this application is in condition for allowed	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>24-28 and 31-39</u> is/are pending in th	ne application.					
4a) Of the above claim(s) <u>24 and 34-39</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>25-28 and 31-33</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/	or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examin	er.					
10) The drawing(s) filed on is/are: a) ac	cepted or b) ☐ objected to by the	Examiner.				
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	• • • • • • • • • • • • • • • • • • • •	•				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreignal a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 119(a	)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documen	its have been received in Applicat	ion No. <u>09/659589</u> .				
3. Copies of the certified copies of the price	•	ed in this National Stage				
application from the International Burea	, , , , , , , , , , , , , , , , , , , ,					
* See the attached detailed Office action for a lis	t of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08</li> </ol>	Paper No(s)/Mail D  5) Notice of Informal F	ate Patent Application (PTO-152)				
Paper No(s)/Mail Date <u>9/23/03, 11/30/05</u> .	6) Other:	,				

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) . . . .

#### **DETAILED ACTION**

1. This Office Action is in response to the Response to the Restriction Requirement filed November 30, 2005. Claims 25-28 and 31-33 of Group II have been elected. It is noted that claims 1-23 and 29-30 were canceled and claims 31-39 have been added in the Preliminary Amendment filed September 23, 2005.

### Claim Analysis

2. Summary of claim 25:

copolymer of ethylene and further 1-olefin			
degree of short chain branching per thousand carbons	2.0-10		
(SCB)			
modulus in MPa (M) & SCB(B)	M = k - 62.5B with k ≥ 820		
	[M + 62.5B ≥ 820]		

# Claim Rejections

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

<sup>(</sup>b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application

Application/Control Number: 10/667,859 Page 3

Art Unit: 1713

for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

## Claim Rejections - 35 USC § 102

5. Claims 25-28 and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Bennett (US 5,955,555).

Bennett discloses polyethylene obtained in the presence of a catalyst system comprising iron (or cobalt ) complex of 2,6-diacylpyridinebis(imine) (claim 1). It is noted that the polyethylene disclosed by Bennett is a homopolymer of ethylene (abstract; all Examples; all claims). However, If the relative amount of comonomer ( $\alpha$ -olefin) is low enough that the effect of comonomer ( $\alpha$ -olefin) on the properties of the resulting copolymer is negligible, the properties of homopolymer of ethylene would be the same as ones of copolymer of ethylene and  $\alpha$ -olefin. In view of the fact that the catalyst systems used in the present claims and the disclosure of Bennett are substantially

Application/Control Number: 10/667,859 Page 4

**Art Unit: 1713** 

identical, the polyethylene disclosed by Bennett would possess the claimed properties because the properties of resulting polymer mainly depending on the catalyst system used to make that polymer. Thus, the present claims are anticipated by the disclosure of Bennett.

#### Claim Rejections - 35 USC § 102/103

6. Claims 25-28 and 31-33 are rejected under 35 U.S.C. 102 (b) as anbicipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yasuhiko et al. (JP 10-007712).

Yasuhiko et al. disclose a copolymer of ethylene and 1-hexene, obtained in the presence of a transition metal compound and an aluminum compound, wherein the transition metal compound is represented by formula 3 and the aluminum compound is R<sup>11</sup><sub>3</sub>Al (solution; claims 1-3; [0001]-[0002]). Although the transition metal is preferable to be Cr, Yasuhiko et al. do recognize that M can be a transition metal other than Cr such as iron and cobalt ([0009]). However, Yasuhiko et al. are silent on the specific properties of the resulting copolymer. In view of a substantially identical catalyst system, compared with the present catalyst system, to be used in preparing the copolymer, the resulting copolymer would possess the claimed properties.

Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. **In re Best**, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); **In re Fitzgerald**, 205 USPQ 594 (CCPA 1980).

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Page 5

#### **Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.

LING-SUI CHOI PRIMARY EXAMINER

February 15, 2006